Combat Service Support Element

Forward Area Self Contained Transportable Fluid System (FAST)

Purpose: To assess enhanced packaged fuel capabilities that support operating forces in expeditionary forward operating conditions associated with *Ship to Objective Maneuver (STOM)* operations.

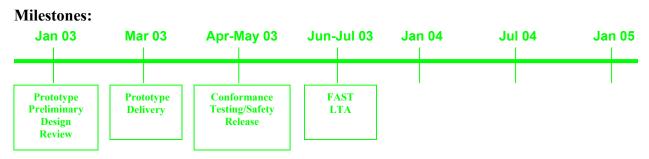
Background: In 1996 the USMC realized the need for supplemental fuel carrying capacity on its' M1A1 Tanks and other armored vehicles. The 55-gallon FLEXCEL met short-term goals but requirements based on STOM and other expeditionary operations require a system without an external pump or pressure requirements.

Description: The FAST system is designed for high portability/transport and can be rapidly deployed and put into service without extensive support equipment or specialized crew. The system is deliberately designed to



achieve high reliability and durability to ensure that it will be operational under mission profiles involving extreme operational conditions. There are no special training requirements. Technical objectives consist of optimized design configurations based on transportability, interoperability and employment requirements; high reliability, and durability; safety features, and advanced materials that either eliminate or significantly reduce life cycle costs. Key components of the FAST system are: the Storage Container, Dispensing System, Fittings/Connections and Support Equipment. During FY03 FAST will be assessed in a series of limited technical assessments (LTA) in order to determine the system's capabilities, limitations and "general" military utility for operational employment. These assessments will identify potential system shortcomings that can be identified as "future" upgrades. Each LTA will be conducted in environments that are as operationally realistic as possible with typical Marine operators to obtain a valid estimate of user-equipment interfaces.

Deliverable Products: Prototype system, assessment reports and requirement documentation.



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